

**ABSTRACT**

The present invention relates to a cross-linkable or cross-linked rubber composition which is usable to constitute a tread of a tire, to such a tread having in particular improved wear resistance, and to a tire having improved endurance by incorporating this tread. A composition according to the invention is based on one or more diene elastomers, said composition comprising at least one hydrocarbon plasticizing resin in a quantity of from 5 phr to 35 phr which is miscible in said diene elastomer(s), having a glass transition temperature Tg of between 10°C and 150°C and a molecular weight of between 400 and 2000 g/mol; one or more of a majority diene elastomer having a Tg of between -65°C and -10°C present in a quantity between 50 phr and 100 phr, and one or more of a minority diene elastomer having a Tg of between -110°C and -80°C present in a quantity between 0 phr and 50 phr.